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Interrogation Report on Four Members of the GAF Sigint Service.

The attached document is a report of the preliminary interrogation of the following four members of the GAF Sigint Service:-

Hptm. HEROLD	O.C. III/353
Oblt. WERTHER	O.C. F/353
Lt. LUDWIG	Ref B./Chi Stelle O.B.d.L.
Oblt. LEICHTLE	25/351

The interrogation was carried out at A.D.I.K. on 6th August 1945 by Dr. Pickering, Capt. Magilavy AUS, Jnr. Cdr. Wilson ATS.

Ticom
11th August 1945

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PRELIMINARY INTERROGATION OF FOUR MEMBERS OF THE G.A.F. SIGINT SERVICE:

Hptm. HEROLD,
Oblt. WERTHER,
Lt. LUDWIG,
Oblt. LEICHTLE.

Interrogation carried out at A.D.I.K. on 6th August 1945.

Interrogator: Dr. Pickering

Present: Capt. MAGILAVY
Junior Cmdr. WILSON.

I) 11.00 a.m. Hptm. WADIM HEROLD, b. 14.10.16.

(Interrogator's note: P/W was definitely not cooperative; he told the truth, but it had to be dragged out of him. Very reluctant to do homework)

Brief history of P/W's career in the G.A.F. Sigint Service.

1) P/W joined the service in spring 1937, when he was posted to the first mobile Intercept Platoon (H.Zug) to be set up, at HALLE/SAALE, as Fahnenjunker. Training was carried out only on manoeuvres. In 1938, after being through the Kriegsschule, P/W was posted to LN.ABT.OBd.L. and sent with a unit to JIRICANA, near BUDAPEST. Covered Czecho-slovak and Russian traffics. Czech Air Force traffics covered were: A/c Security device Met. Service, Army Co-op.(morse). Enciphered material was handled by W.STELLE PULSNITZ and W. LEIT 4 in Vienna. (Here digressions elicited the statements that W. 24 was at this time in BRESLAU and that the Czechs were believed to have broken the Wehrmachts-handschluessel.)

Cipher material was also handled in Berlin, passed on a T/P link. Personalities at Berlin at this time were:
Hptm. KOHLMORGEN, Head of Chi-Stelle,
Lt. von LINGEN, cryptanalist for Russian ciphers.

2) In Feb. 1939, P/W went to the SCHUL- u. VERSUCHS REGT. KOETHEN (developed from the Abt. in Halle), and took over an Intercept Platoon from Oblt. OELJESCHLAEGER. Here personnel were trained for the W. Stellen. The platoon was to have covered ESTHONIA, but, shortly before the out-break of war, went in part to ZIPSER NEUDORF in Czecho-slovakia. Unit here cooperated with FESTE HORCHSTELLE TULIN, and prepared for the Polish campaign, which was subsequently followed up to Cracow. Only A/c Security and artillery nets (P/L) were covered by the platoon.

3) In Oct. 1939, P/W returned to Berlin, to III Abt. OB.d.L. which was by now purely Sigint. He did no cryptanalysis, and was mainly employed, up to Xmas, on free-lance work ("z.b.V.") at Marstall, learning the work of the various departments purely from an intercept point of view.

At this time, the Sigint. platoons set up at Koethen were brought up to company strength.

4) On 1.1.40, P/W went to the Chi. Stelle OKW, Tirpitzupfer (CO. Obstlt. KEMPF), whither he was detached for 3 days to the various departments.

The OKW was at this time interested in setting up intercept stations in BULGARIA for Army, Air Force and Navy (the Navy declined, however, to participate). P/W was sent to the G.A.F. station formerly part of the OKW Complex, in VARNA, which was given the cover-name "KOMMANDO NORDLAND". This Sigint detachment, consisting of 22 men in civilian clothes, covered traffics in SYRIA, GREECE, RUMANIA, and a few Med. traffics (ferry flights). Five receivers were employed. No cryptanalysis was done, and there was no personnel for this. P/L was dealt with on the spot, and all enciphered material taken was passed back to OKW/Chi.

5) P/W was up to Dec. '4- in VARNA, and then spent a short time at the intercept station being set up by the GAF. in CONSTANZA. This latter was an outstation of the station W.zb.V at BUDAPEST.

6) In Jan. '41, P/W was appointed O.C.9/LN.Rgt. 4, at SOFIA. The Coy. covered: TURKEY (Air Force); English R/T in the Med.; Jugoslavian traffics; Greek Air Force.

A Trupp trained by Reg.Rat. VOEGELE joined the Coy., and handled cryptanalysis. It worked on English four-figure, reserving "Satz-Buecher" from Berlin for the purpose.

In May 1941, 9/4 took over Russian intercept from SOFIA: and covered in part the Jugo-slav campaign, but P/W had nothing of value to say on this.

7) P/W subsequently withdrew with his Company to III/LN.Rgt. 4 in Vienna. (At this time, W.14 was at HIRSCHSTETTEN, c. 30 kms. NE. Vienna.) 9/4 was then transferred to RANIKULSARAT, Rumania, to IV Fliegerkorps. P/W remained as C.O. of 9/4 until Nov.'43; the Coy. joined up with the Abt. (III/4) in NIKOLAIEV.

Tasks of 9/4 on the Russian Front: in general, cover of the Air Armies (17, 5, 8, and 2 LA's) opposing Luftflotte 4.

Ciphers: 5Z was sent to Berlin for breaking.
3Z and 4Z, - both used by Air Armies, - were broken by the forward parties.

8) Further points in career of P/W: O.C. a special Sigint Detachment at Kerch, Crimea (Feb. '43); withdrawal with unit to KHARKHOV; back to the Abt.(NIKOLAIEV); with special Detachment to MARIUPOL, to cover Air Armies operating from Crimea; appointed O.C. III Abt./4 in Nov. '43, and remained so until capture; accompanied the Abteilung's retreat to BACAU, - DEBRECEN, - HORN bei WIEN (autumn '44); April '45 to MONSKIRCHEN bei PASSAU; 2nd May to TAUPLITZ in STYRIA.

P/W was requested to write a report covering the following subjects: - (It is hoped that P/W may overcome his reluctance when he has been instructed to do so by a senior German Air Force officer: this has been requested):

Homework given to Hauptmann HEROLD 6/8/45.

1) History of organisation of G.A.F.Horchdienst particularly:-
   a) Earliest stages
   b) Evolution of III/Abt. from W-Stellen (with fullest details) Remaining W-Stellen.
   c) Final reorganisation. How was III/4 coverted to III/353 (company by company)?
2) Cryptography.
   a) Details of HEROLD'S own work

b) Details of work done
at Constanza Jugoslav) describe systems
Greek) attempted and
British) solved.
c) Describe in detail work on Russian
2 - Z
3 - Z
4 - Z
d) Describe methods (interception, forwarding, study, results) on 5 - Z

3) Career of Hptm. HEROLD in Horchdienst from 1937 - 1945. (units, locations, tasks, successes).

4) Liaison with
(Heerew) Kdr. d. N.A.
Marine B-Stellen (Konstanza, Eupatoria).

II) 1.45 p.m. Oblt. WALDEMAR WERTHER, b. 2.6.13.

(Interrogator's note: P/W was fully cooperative; he is, indeed, hurt at any sign of a tendency to look upon him as a P/W. He took time to deliberate, and appeared to search for accuracy in his answers. He was however bad on dates and names of units. When he refused or deprecated information, it was on the grounds of insufficient accurate knowledge. He does not wish to mislead.

1) P/W is an officer of the Reserve (student of economics, with no particular leanings to mathematics) but joined the Sigint Service in summer '37 as a civilian cryptanalist. He was with the Chi. Stelle Ob.d.L. until 1942. Former head of the Chi Stelle was Major FREUDENFELD, who was succeeded by Oberstlt IMMISCH (now dead); latterly, Obstlt. FRIEDRICHS.

At the Chi. Stelle, P/W specialised in Russian ciphers, also Lithuanian; he worked on Hungarian and Slovak as well, and a little Polish. His section head was Lt. von LINGEN.

2) P/W received his training as civilian employee at the 2nd. Coy Gaf. Sig. Abt. (2te Komp. LN.Abt.) BERNAU. (A digressive discussion, arising from the mention of "W.Leit 1 later at BERNAU", produced the statement that: - W.2 OB.d.L. was Chi Stelle (W.10) OST, manned by 14/z.b.V. OB.d.L.).

P/W next did his four months' military training at BERLIN - KLADOW (LN. Ers. Komp. Kladow), and was then to have gone to BRESLAU, but returned instead to the Chi. Stelle, and trained under VOEGELE, who was at that time working on Czech ciphers. P/W joined the Russian section (comprising 3 men) in late summer 1937, and continued working there until Jan. '39. Good progress with Russian ciphers was made. P/W made frequent visits to outstations, notably to INSTERBURG, where Lithuanian ciphers were worked on.

3) Jan. '39 P/W joined W. z.b.V. in BUDAPEST (a "camouflaged" station in civilian dress), as head of the cryptanalytic section, and also "Auswerter". He had a section of 8 decoders; work was mainly on Russian and Czech ciphers. He essayed cooperation with the Hungarian opposite number, Oberst PETRILOVIC, but found that the Hungarians were poor, but also somewhat "cagey". He tried to break into Rumanian Air keys at this time. He can state that the Hungarians were working on Rumanian diplomatic ciphers, particularly on Rumanian Foreign Office.

P/W then returned to Berlin, and, coincident with outbreak of war, became von LINGEN's deputy.

4) P/W told of great activity in cryptanalysis during the Russian occupation of E. Poland. Successes with Russian key procedure were very reassuring.

The Finnish-Russo war ensued. Practically all Russian keys were read with success. Five-figure was read with some delay; four-figure with astounding rapidity; reciphers were broken into currently. P/W succeeded in getting 20 calculating assistants, but little of intelligence value resulted.

After the Finnish war, the Russians improved their cipher procedure considerably. A captured Russian document showed official criticism of former procedure, but no suspicion of "enemy" cryptanalytic success. P/W thought that throughout the war the Russians overestimated their own ciphers. Nevertheless, there were innovations introduced which caused difficulty for German cryptanalysts. W/T nets became smaller, more regional; general instructions sent from higher authority were interpreted individually by each signals officer, with the result that every net had a procedure peculiar to itself. Though this was a primitive method, the results caused the Germans plenty of trouble.

Auswertung could at first not identify Russian call-signs, and the aid expected by cryptanalysis from T.A. was not forthcoming. Later the T.A. situation improved.

5) In 1941 P/W went with the Chi Stelle to E. Prussia; in the winter the party moved back to the Marstall (Potsdam), and in May 1942 forward to JITOMIR. P/W wished to work more independently than was possible at the HQ., and therefore secured, in the summer, a transfer to III Abt./LN.Rgt. 1 at RIGA. Here he was in charge of the crypto. section of the Evaluation (Ausw.) Company, and remained there for about a year.

In the late summer 1943, he joined the GAF. Sigint service in the central front, and became O.C. 10/LN. Rgt 35 (also called "1 Funkauswerte Kompanie der Funkhorchabteilung OST). 9/ and 11/35 were intercept companies. Later, Fu.Ho.Abt. Ost became II/LN. Rgt. 353; and 10th (Evaluation) Coy./35 became 7 (Evaluation)/353. P/W remained, until capture, O.C. 7/353, and chief cryptanalyst.

6) Successes with Russian ciphers: P/W could give no information on use of Hollerith machines as an aid to cryptanalysis and appeared to have had no experience of them. He stated that Professor NOVOPASHNI had made a few machines for work on five-figure cipher, but the results did not justify the labour.

P/W had no detailed information on Russian five-letter. When Odessa was encircled, signals of this type were heard, which were thought to be machine. 5-letter was used in ADD (long range bomber) traffic between Front (Army Group) Commands and Air Armies or ADD Corps.

Oblt. Werther was asked to write a report, as follows:-

HOMEWORK FOR WERTHER.

1) Rough outline of career.
2) Organisation of Chi Stelle Ob. d. L. (Particularly OST - locations, organisation of work, personalities and their work).
3) Work on non-Russian codes with fullest details.
4) Work on Russian codes with fullest details:
   a) 2 - Z
   b) 3 - Z
   c) 4 - Z

d) 5 - Z

under headings: users
nature of general contents
volume
rate of change of keys
method of attack
drawings of redonstructed systems (basic codes and reciphers - Ueberschluesselung).

5) Improvements in Russian code security during war, examples, and effect on German method of attack.
6) Russian call-sign systems (Aufbau, Grundbuch, Entnahme).
7) What do you know about Reichsforschungsamt?

III) 3.00.p.m. LT. MARTIN LUDWIG, b. 21.4.07.

(Interrogator's Note: P/W is cooperative. Expert on Allied Air OB., knowledgeable on Allied codes and ciphers.)

1) (Brief preliminary history of career in GAF. Sigint.) In civilian life, P/W had been in business; he joined the GAF. 8.8.39 as Flaksoldat. In July 1940 he was transferred to Sigint, and joined 16/OB.d.L. in Potsdam. Later went to W.13 at MUENCHEN-OBERHACHING: De Gaullist traffics were covered from there. Subsequently, to WO.313 in PALERMO, where cover of French North African traffics continued, as it was suspected that some operation was being prepared. When the main body of WO 313 went to Greece, P/W remained in Sicily with the party that went to TAORMINA, whence cover of MALTA was carried out. After a return to Potsdam, P/W joined REF.B. in PARIS - ASNIERES, (cover-name KAMERUN.).

2) (Work at Ref. B.) Ref. B's commitments comprised: Final evaluation,- Battle Orders, - Strengths and concentrations, - Tactics, - (of Allied Air Forces,); no immediate evaluation (Sofortauswertung) was done at Ref. B. Ref.B. also controlled the operations of all Sigint units covering British traffics. Ref.B.5 was responsible for cover etc. of all American wireless links; also of wireless T/P links, but in this the Army FESTE STELLE 3 at EUSKIRCHEN was far ahead. Both P/L and cipher were taken. Ref. B. 5 went later to MUENCHEN OBERHACHING, where, as far as P/W knew, it still was in April '45.

3) P/W's own work: P/W stated he had become, successively, the expert on: Bomber, Fighter, and Coastal Commands of the RAF.; A.C.C.; Tactical Air Force; 9th. USAAF (for details, see the comprehensive report prepared by him)*. P/W joined Ref. LIMBURG, where he remained until March 1945, and was then commissioned; he was due later to go to Ref. C.

Cryptanalysis

P/W knows a fair amount about German work on allied codes and ciphers. He knew SYKO, SLIDEX and M 209 by name. His homework will be on particularly these subjects. He was instructed to distinguish carefully between what he "knows", what he "had heard" etc. (It is a change to come across a German Sigint member who had kept his ears open for interdepartmental talk.) What he said in the few minutes devoted to this subject is being held back until the 'homework' appears, partly because P/W did not stick long to the subject of one code or cipher. It seemed better to let him touch lightly on all subjects, whilst noting homework for him.

* written by P/W at BAD KISSINGEN and not yet available--evidently a comprehensive report of some 80 pages.

HOMEWORK FOR LT. LUDWIG

1) Dieppe
2) Warnings of major operations (Arnhem etc.).
3) Organisation of Referat B.
4) Interception of weather and exploitation (Husum, W 22)
   Organisation of Bomber Code work (Prizes etc.)
5) Ground nets in Britain

British. Machine (5 B)
4 Z (General Wurm) (South & West)
Syko (Mediterranean & West)
Slidex. Exercise Spartan
Reports of Kdr. d. N.A.5.
M.209 (9th Air Force, Troop Carrier Cd.
)8th Fighter Command (65 and 67 Wing)
(Delays in decoding.

6) Call-sign systems of the Allies.

IV) 4.00 p.m. Oblt. GEORG LEICHTLE, b. 28.4.17.

(Interrogator's Note: A dull and boring type. Seems to have divided his time between work with GAF Sigint and Studienurlaub (Electrotechnics). Very reluctant to undertake to write 'homework'.)

1) P/W joined the GAF. on 2.11.37, and was posted to LN. Komp. 3/15 (Funkkomp.), MUENCHEN FREIMANN, for training as W/T operator.

In early '38 he was posted to the GAF. Sigint unit which was at that time called W.15, in MUENCHEN SOLLN; this station was renamed W. 13, and later located at MUENCHEN OBERHACHING.

W.15 (13) covered Africa and America (supply and command nets); no cryptanalytic work was done.

2) In 1941, P/W was sent to III/LN. Rgt. L.C. 3 at PARIS-BOUGIVALIE. He was with the 7th, and later the 8th, Company, and spent some time in Cherbourg with the latter.

(Digression: 7/LN Rgt. 3 became 14/3 (later 25/351.)
GAF. Sigint expanded from 300 in 1937
to 13,000 in 194(4).)

III/3 had four companies: 8, 16, 10 LN Rgt. 3. and 5/West.

3) 1.12.41 - 1.12.42, P/W was liaison officer with Fliegerkorps IX then returned to 14/3 (25/351); and, after leave for study went to Gen. Nafue 3 Abt. in the summer of '44. P/W stated that the 3 Abt. was for most of the war at GOLDAPP, East Prussia.

4) P/W's work with 14/3 (25/351). R/T evaluation; has no knowledge of practical crypto work, but knows the name Slidex, and that it was exploited.

5) Interception of American wireless teleprinter: P/W stated this took place in Berlin - Schoenfeld. Types of traffic covered were the "FF5" and "FF6". P/W was of the opinion that not much progress was made; there was little or no contact with industry, and the main driving force for the work came from WA. PRUEF 7. Note: Compare TICOM/I-42, p. 3.

P/W said that some interception of FF5 was carried out under Chi-Stelle Ref. B. at HABICHTSTHAL, but only as subsidiary to the main work.

Asked if he knew about the "teleprinter traffic" intercepted at PARIS-ASNIERES (TICOM/I-42 and previous references, there given), he professed ignorance, but said that the following officers should be consulted: Oblt. BECKER - Leiter d. Ref. B.
" FRIESE - W. 13, MUNICH.

P/W was asked to write a report on the organisation of the GAF Sigint Service as known to him.